

**THE CLAIMS**

What is claimed is:

1. A method of facilitating the conception of one or more inventions in target market and/or technology areas by a group of one or more participants, the method comprising:

5 (a) a set of one or more steps accomplished by a facilitator, comprising one or more steps selected from the group consisting of:

(i) communicating guidelines for creative thinking to the participants wherein the guidelines for creative thinking comprises creativity tools; and

10 (ii) facilitating any one or more of steps (b)(i) to (b)(vi); and

(b) a set of one or more steps accomplished by the participant(s), the set of steps comprising one or more steps are selected from the group consisting of:

(i) conceiving of and establishing a mess statement;

(ii) conceiving of facts, data, and/or relevant attributes relevant to the mess statement;

15 (iii) conceiving of problem statements related to the mess statement, wherein the problem statements are identified using creativity tools and/or creative stimuli comprising one or more of the facts, data, and/or relevant attributes identified in step (ii) as creative stimuli;

20 (iv) conceiving of elements of solutions to the problem statements, wherein the elements are conceived using creative stimuli comprising stimuli selected from the group consisting of:

(1) one or more of the problem statements conceived in step (b)(iii); and

25 (2) one or more of the facts, data, and attributes of step (b)(ii) as creative stimuli;

(v) conceiving of inventions using one or more creative stimuli comprising stimuli selected from the group consisting of:

(1) one or more of the creativity tools communicated in step (a);

(2) one or more of the problem statements conceived in step (iii);  
5 and

(3) one or more of the elements conceived in step (iv); and

(vi) expanding one or more of the inventions conceived in step (v).

2. The method of claim 1 wherein step 1(b)(i) is accomplished by the participants and facilitated by the facilitator.

10 3. The method of claim 1 wherein step 1(b)(ii) is accomplished by the participants and facilitated by the facilitator.

4. The method of claim 1 wherein step 1(b)(iii) is accomplished by the participants and facilitated by the facilitator.

15 5. The method of claim 1 wherein step 1(b)(iv) is accomplished by the participants and facilitated by the facilitator.

6. The method of claim 1 wherein step 1(b)(v) is accomplished by the participants and facilitated by the facilitator.

7. The method of claim 1 wherein step 1(b)(vi) is accomplished by the participants and facilitated by the facilitator.

20 8. The method of claim 1 wherein the facilitator also acts as a participant.

9. The method of claim 1 further comprising assessing the inventions based on pre-determined criteria to identify a list of most valuable inventions.

10. The method of claim 1 further comprising communicating to a decision making group information about the inventions, the information comprising a ranking of the invention  
25 according to one or more business or technical criteria.

11. The method of claim 1 further comprising, prior to communicating guidelines for creative thinking, communicating basic concepts of patentable inventions to the first group of participants.

12. The method of claim 11 wherein said communicating basic concepts of patentable inventions to the first group of participants is accomplished by the facilitator.

5 13. The method of claim 11 wherein the basic concepts of patentable inventions subject matter concepts comprises one or more of the following:

(a) a concept of new, useful and non-obvious criteria of patentable inventions;

(b) a concept of a ladder of abstraction;

10 (c) a concept of bar dates of when a participant is entitled to obtain patentable inventions;

(d) a concept of publication as a means of obtaining freedom of action and of obtaining a low cost way of protecting basic inventions by patenting the basic inventions and publishing the incremental improvements around the basic inventions;

15 (e) a concept of inventorship;

(f) a concept of invention type, wherein the invention type is selected from a group consisting of an apparatus, a method, an article of manufacture, a composition of matter, a functional invention and a business process invention;

20 (g) a concept of moving an invention type from an apparatus to a method of invention, and an article that results from the method of invention;

(h) a concept of invention views, wherein the invention views comprise relating the invention to capability of an assignee of the invention, capability of an end-user of the invention, and capability of a supplier of the invention;

25 (i) a concept of class of invention, wherein the class is selected from a group consisting of breakthrough (pioneering), distinctive and incremental;

- (j) a concept of licensing value, wherein the licensing value comprises a perceived monetary value of the invention;
- (k) a concept of enablement;
- (l) a concept of prior art, and significance that prior art has on patentability of the inventions; and
- 5 (m) a concept of disposing of the inventions, wherein the disposing of the inventions comprise at least one of the following patenting the invention, publishing the invention with known inventors, publishing the invention anonymously, and holding the invention as trade secret.

10 14. The method of claim 1 further comprising, prior to the communicating guidelines for creative thinking, training the first group of participants on creativity and associative thinking methods.

15 15. The method of claim 14 wherein the training of the first group of participants on creativity and associative thinking methods comprises one or more steps accomplished by the participant(s), the set of steps comprising one or more steps selected from the group consisting of:

- (a) considering the one or more problem statements conceived in step 1(b)(iii), at least one element conceived in 1(b)(iv) and at least one “how to” question; and
- (b) linking one or more problem statements conceived in step 1(b)(iii), one or more elements conceived in 1(b)(iv) and the at least one “how to” question.

20 16. The method of claim 1 further comprising, prior to the communicating guidelines for creative thinking, defining the target market and/or technology areas in which inventions are desired.

17. The method of claim 1 wherein the mess statement comprises:

25 (a) a wish stem; and

- (b) a concise description of a desirable outcome to a problem that currently has no acceptable solution.

18. The method of claim 1 wherein the one or more problem statements conceived in step 1(b)(i) comprise "how to" type questions.

19. The method of claim 1 wherein the guidelines for creative thinking further comprise one or more of the following:

5 (a) generating options guidelines wherein the generating options guidelines are selected from the group consisting of:

(i) a deferring judgment guideline, wherein the first group of participants is asked to eliminate premature judgment of ideas;

(ii) a striving for quantity guideline, wherein the first group of participants is asked to seek many ideas;

(iii) a freewheeling guideline, wherein the first group of participants is asked to be open minded, even to the point of suggesting outlandish ideas; and

(iv) a seeking combinations guideline, wherein the first group of participants is asked to combine ideas and use ideas of other participants of the first group of participants to inspire new ideas; and

10 (b) focusing options guidelines wherein the focusing options guidelines are selected from the group consisting of:

15 (i) a using affirmative judgment guideline, wherein the first group of participants are asked to encourage other participants of the first group of participants to look for solutions to the problems rather than looking for new problems;

20 (ii) a being deliberate guideline, wherein the first group of participants are asked to use the structure of the creativity tool and a creative problem solving process to reach solutions to the problems; and

25 (iii) a staying the course guideline, wherein the first group of participants are asked to acknowledge the need to reach solutions to the problems, and to avoid wandering off on creative tangents.

20. The method of claim 1 wherein the creativity tools comprise one or more of the following:

(a) divergent tools wherein the divergent tools are selected from the group consisting of:

5 (i) interactive brainstorming;

(ii) silent brainstorming;

(iii) visually identifying relationships (VIR)/Forced Fit; and

(b) convergent tools wherein the convergent tools are selected from the group consisting of:

10 (i) Multi-Voting;

(ii) categorizing / use multi-voting;

(iii) IOD™; and

(iv) adding more enablement.

21. The method of claim 20 wherein the interactive brainstorming comprises:

15 (a) a set of one or more steps accomplished by the participant(s), the set of steps comprising one or more steps selected from the group consisting of:

(i) writing down ideas to solve the one or more problem statements conceived in step 1(b)(iii) by the first group of participants;

(ii) reading the ideas to solve the one or more problem statements conceived in step 1(b)(iii) aloud as soon as the ideas are written down; and

20 (iii) handing the written ideas to a facilitator;

(b) displaying the written ideas via a display medium by the facilitator;

wherein, the first group of participants benefit from stimulus from the other participants of the first group of participants' ideas.

22. The method of claim 21 wherein the display medium comprises at least one of the following a wallboard, a flipchart, a poster board, a whiteboard, a chalkboard, a projection screen, a computer display, a Velcro™ board, a textile board and a felt board.

23. The method of claim 21 wherein the ideas are written on sticky pieces of paper.

5 24. The method of claim 20 wherein the silent brainstorming comprises:

(a) a set of one or more steps accomplished by the participant(s), the set of steps comprising one or more steps selected from the group consisting of:

(i) writing down ideas to solve the one or more problem statements conceived in step 1(b)(iii) by the first group of participants;

10 (ii) repeating step (i) for a period of time generating a plurality of the ideas to solve the one or more problem statements conceived in step 1(b)(iii);

(iii) handing the written ideas to a facilitator;

(b) displaying the written ideas via a display medium by the facilitator;

wherein, the first group of participants benefit from the quiet in the room to come up with new ideas to solve the one or more problem statements conceived in step 1(b)(iii) without distraction from other participants of the first group of participants.

15 25. The method of claim 24 wherein the display medium comprises at least one of the following a wallboard, a flipchart, a poster board, a whiteboard, a chalkboard, a projection screen, a computer display, a Velcro™ board, a textile board and a felt board.

20 26. The method of claim 24 wherein the ideas are written on sticky pieces of paper.

27. The method of claim 20 wherein the visually identifying relationships (VIR)/Forced Fit comprises:

(a) a set of one or more steps accomplished by a facilitator, comprising one or more steps selected from the group consisting of:

25 (i) supplying the first group of participants an object;

(ii) asking the first group participants to list attributes of the object; and

(iii) asking the first group of participants to use the attributes as stimuli to conceive problem statement(s) and/or element(s); and

(b) a set of one or more steps accomplished by the participant(s), the set of steps comprising one or more steps selected from the group consisting of:

5 (i) listing attributes of the object; and

(ii) conceiving problem statement(s) and/or element(s) using the attributes of the object as stimuli.

28. The method of claim 20 wherein the multi-voting comprises:

(a) pooling a list of ideas to solve the one or more problem statements conceived in 10 1(b)(iii);

(b) displaying the list of ideas via a display medium;

(c) determining idea selection criteria comprising discussions between a facilitator, an assignee's representative, and the first group of participants;

15 (d) distributing selection indicators from the facilitator to the first group of participants;

(e) selecting preferred solutions by the first group of participants using the selection indicators; and

(f) prioritizing the selections based on the first group of participants' selections using the selection indicators.

20 29. The method of claim 28 wherein the selection indicators comprise sticky dots.

30. The method of claim 29 wherein said sticky dots comprise one or more colors

31. The method of claim 28 wherein the display medium comprises at least one of the following a wallboard, a flipchart, a poster board, a whiteboard, a chalkboard, a projection screen, a computer display, a Velcro™ board, a textile board and a felt board.

32. The method of claim 20 wherein the categorizing / use multi-voting comprises a set of one or more steps accomplished by a facilitator, comprising one or more steps selected from the group consisting of:

5           (a) identifying suitable categories the categories comprising preferred elements of potential the inventions;

             (b) collecting written possible ideas to solve the one or more problem statements conceived in 1(b)(iii), into groups corresponding to the categories; and

             (c) using multi-voting to identify a preferred group.

33. The method of claim 32 wherein the multi-voting comprises:

10          (a) pooling a list of ideas to solve the problem statements;

             (b) displaying the list of ideas via a display medium;

             (c) determining idea selection criteria comprising discussions between a facilitator, an assignee's representative, and the first group of participants;

             (d) distributing selection indicators from the facilitator to the first group of participants;

15          (e) selecting preferred solutions by the first group of participants using the selection indicators; and

             (f) prioritizing the selections based on the first group of participants' selections using the selection indicators.

20          34. The method of claim 20 wherein the IOD™ comprises:

             (a) placing a collection of "best" possible ideas to solve the one or more problem statements conceived in 1(b)(iii), by a facilitator; and

             (b) a set of one or more steps accomplished by the participant(s), the set of steps comprising one or more steps selected from the group consisting of:

25           (i) finding a seed of the invention, the finding a seed comprising associating and combining at least one of the one or more problem statements

conceived in 1(b)(iii) and at least one of the one or more elements conceived in 1(b)(iv);

(ii) finding a problem with the seed of the invention;

(iii) improving the invention by solving the problem with the seed of the invention; and

(iv) repeating steps (ii)–(iii) until a satisfactory basic invention has been identified.

35. The method of claim 20 wherein the adding more enablement comprises using one or more of the following:

(a) divergent creativity tools;

(b) convergent creativity tools; and

(c) existing experience of the first group of participants to add sufficient enablement.

36. The method of claim 1 wherein each of the inventions is shared with a second group of participants comprising displaying each of the inventions to the second group of participants and explaining each of the inventions.

37. The method of claim 1 wherein expanding each of the inventions comprises the first group of participants identifying ways to improve the inventions by identifying subordinate “how to” type problems through positive question(s).

38. The method of claim 37 wherein expanding each of the inventions comprises the second group of participants identifying ways to improve the inventions by identifying subordinate “how to” type problems through positive question(s).

39. The method of claim 37 wherein the positive question comprises a question(s) “How would you deal with a given problem ‘A’ in one of the inventions?” wherein the given problem ‘A’ comprises any possible problem related to the inventions.

40. The method of claim 1 wherein expanding each of the inventions comprises performing round-robin invention expansion the performing round-robin invention expansion

comprises a set of one or more steps accomplished by the participant(s), the set of steps comprising one or more steps selected from the group consisting of:

- (a) posting a description of each of the inventions;
- (b) examining each of the inventions by the first group of one or more participants;  
5 and
- (c) writing one or more of the following a subordinate "how to" problem statement, a solution to the subordinate "how to" problem and an alternate embodiment of the inventions on the description of each of the inventions by the first group of participants.

10 41. A method of facilitating the conception of one or more inventions in target market and/or technology areas by a group of one or more participants, the method comprising:

- (a) a set of one or more steps accomplished by a facilitator, comprising one or more steps selected from the group consisting of:
  - (i) communicating basic concepts of patentable inventions to the first group of participants;
  - (ii) training the first group of participants on creativity and associative thinking methods;
  - (iii) defining the target market and/or technology areas in which inventions are desired; and  
20 (iv) communicating guidelines for creative thinking to the participants; and
- (b) a set of one or more steps accomplished by the participant(s), the set of steps comprising one or more steps selected from the group consisting of:
  - (i) conceiving of and establishing a mess statement;
  - (ii) conceiving of facts, data, and/or relevant attributes relevant to the mess statement;  
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(iii) conceiving of problem statements related to the mess statement, wherein the problem statements are identified using creative stimuli comprising one or more of the facts, data, and/or relevant attributes identified in step 1(b)(ii) as creative stimuli;

5 (iv) conceiving of elements of solutions to the problem statements, wherein the elements are conceived using creative stimuli comprising stimuli selected from the group consisting of:

(1) one or more of the problem statements conceived in step 1(b)(iii); and

10 (2) one or more of the facts, data, and attributes of step 1(b)(ii) as creative stimuli;

(v) conceiving of inventions using one or more creative stimuli comprising stimuli selected from the group consisting of:

(1) one or more of the creativity tools;

15 (2) one or more of the problem statements conceived in step 1(b)(iii); and

(3) one or more of the elements conceived in step 1(b)(ii);

(vi) sharing the inventions with other participants of the first group of participants; and

20 (vii) expanding each of the inventions to broaden and determine a path to full enablement;

(c) assessing the inventions based on pre-determined criteria to identify a list of most valuable inventions; and

(d) communicating to a decision making group information about the inventions, the information comprising a ranking of the invention according to one or more business or technical criteria.

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42. A method of facilitating the conception of one or more inventions in target market and/or technology areas by a group of one or more participants, the method comprising:

- 5 (a) providing a first group of participants, wherein the participants have sufficient technical knowledge that each of the first group of participants is capable of contributing to finding solutions to the technical problem;
- (b) providing a facilitator with expertise in creative problem solving and inventive problem solving;
- (c) providing a display medium;
- 10 (d) providing note pads in sufficient quantity for a one-to-one correlation with the first group of participants;
- (e) providing to the first group of participants a plurality of pictures for use as visually identifying relationships (VIR) tools;
- (f) providing small objects for use as Forced Fit tools; and
- (g) providing sticky dots for use in Multi-Voting.

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44. The method of claim 42 wherein said first group of participants are provided colored pens with sufficient colors for a one-to-one correlation with the first group of participants so inventorship of each of plurality of derived inventions can be determined;